

REMARKS

Present Status of Application

Applicants thank the Examiner for the thorough examination of this application.
5 The Office Action, however, still rejected all claims 1-18. Specifically, claims 1-18 were rejected under 35 USC 102(e) as being anticipated by Ueno et al. (US 2005/0204373 A1).

Applicants respectfully traverse the rejection and request reconsideration of all rejected claims for the reasons set forth below.

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Discussion of Office Action Rejections

Rejection of claims 1-18 based on 35 USC 102 (e)

The Office Action rejected claims 1-18 under 35 USC 102 (e) as being anticipated by Ueno. The Applicants respectfully traverse this rejection for at least
15 the reasons set forth below.

The Office Action alleged that Ueno teaches the use of multiple control profiles throughout his specification in addition to calculate an optimal drive profile through a simple algorithm by using the change in speed and elapsed time. Figs. 49, 50 and 51 show profiles during loading and ejection of the driving circuit within and outside a
20 guaranteed range of temperature (see page 34 para [0612]).

However, for each of different conditions, Ueno teaches using only one control profile to calculate and find an optimal drive profile. Fig. 49 shows a profile of a loading operation, in which the section (a) shows a loading operation within a guaranteed range of temperature while the section (b) shows a loading operation
25 outside the guaranteed range of temperature. Seeing page 35 para [0632] to page 36 para [0637], one example in detail with reference to Fig. 51(b) is described. Further, Fig. 51(b) shows a drive profile during loading, with drive process numbers assigned. Fig. 51(b) shows a drive profile during loading, with drive process numbers assigned. During loading process, a loading profile, Fig. 49(a) or Fig. 49(b), is used to be
30 adjusted, and the loading profile can be divided into several portions as shown in Fig.

51(b). Accordingly, by controlling the time T, an optimal drive profile for loading is derived.

Similarly, Fig. 50 shows a profile of an ejection operation, in which the section (a) shows an ejection operation within a guaranteed range of temperature while the section (b) shows an ejection operation outside the guaranteed range of temperature. Fig. 51 (c) shows a change in profile during ejection, in which the profile is divided into several portions, and the time T is controlled during the ejection operation for deriving the optimal drive profile in a similar manner to that during loading.

Therefore, regardless of during loading or ejection process, Ueno teaches to directly adjust a basic drive profile for deriving the optimal drive profile by controlling the time T of the basic drive profile.

In contrast, the independent claim 1 in present application defines a method of determining an optimal control profile for adjusting tray-in/out speeds of a tray in an optical disk drive. The method comprises setting a plurality of control profile sets first, and then driving the tray for movement with a control profile among the control profile sets. After measuring a plurality of tray speeds at a plurality of predetermined points in the control profile and checking if the control profile is acceptable or not according to the comparison values, a next control profile is selected from the preset control profile sets if the control profile is not acceptable. Or the control profile is set as the optimal control profile if the control profile is acceptable.

In the present application, a plurality of control profile sets are set before starting to drive the tray and find an acceptable control profile. Each of the control profile sets is divided into several segments, and the force or the time of at least one segment of one control profile set is different from that of the other control profile sets as the sets add1, add2, add3 and add4 described in present application. The method claimed in claim 1 is an optimal process for finding the acceptable control profile among the preset control profile sets. On the other hand, the resulted acceptable control profile according to claim 1 is one of the preset control profile sets. By the preset a plurality of control profile sets and the method of determining an optimal

control profile disclosed in present application, the optimal control profile among the preset control profile sets can be selected and found quickly.

Therefore, the Ueno reference fails to disclose setting a plurality of control profile sets and selecting a next control profile from the predetermined control profile sets to find an optimal control profile among the preset control profile sets.

As the Ueno reference fails to disclose all of the claimed elements of claim 1, claim 1 should be allowed at least this reason.

Moreover, since claims 2-8 depend from claim 1, they patentably define over the Ueno reference for at least the same reasons.

Furthermore, as claims 9 and 14 have similar limitations with claim 1 such like setting a plurality of control profile sets, they should be allowed at the same reasons.

Moreover, since claims 10-13 and 15-18 depend from claims 9 and 14 respectively, they patentably define over the Ueno reference for at least the same reasons.

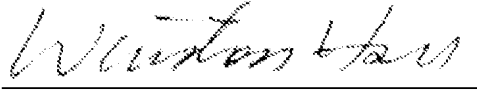
Conclusion

Accordingly, Applicants respectfully submit that claims 1-18 patentably define over the cited art of record and are in condition for allowance.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Appl. No. 10/710,855
Amdt. dated February 19, 2008
Reply to Office action of November 20, 2007

Sincerely yours,



Date: 02/19/2008

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